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मानक

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“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

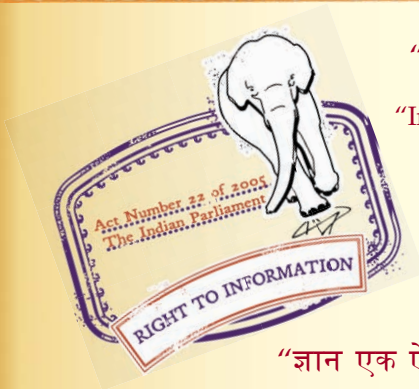
“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 1093 (1981): Handloom Cotton Madras Handkerchiefs [TXD
8: Handloom and Khadi]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

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Indian Standard
SPECIFICATION FOR
HANDLOOM COTTON MADRAS
HANDKERCHIEFS
(*First Revision*)

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Indian Standard

SPECIFICATION FOR HANDLOOM COTTON MADRAS HANDKERCHIEFS (*First Revision*)

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Indian Standard

SPECIFICATION FOR
HANDLOOM COTTON MADRAS
HANDKERCHIEFS
(*First Revision*)

0. FOREWORD

0.1 This Indian Standard (First Revision) was adopted by the Indian Standards Institution on 9 November 1981, after the draft finalized by the Handloom and Khadi Sectional Committee had been approved by the Textile Division Council.

0.2 This standard, which was first published in 1957, has been taken up for revision in order to make it up-to-date. Important changes carried out in the standard are:

- a) deletion of breaking strength values, since the standard recommends the use of yarn conforming to IS : 171-1973*; and
- b) inclusion of inspection marking and packing clauses.

0.3 Standards of Weights and Measures Act, 1976 stipulates the use of International System of Units in the country; in order to familiarize the industry with this system, the recommended SI units for use in the textile industry are given in Appendix A.

0.4 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS : 2-1960†. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1. SCOPE

1.1 This standard prescribes the constructional particulars and other requirements of four varieties of handloom cotton Madras handkerchiefs.

*Specification for grey cotton yarn (*second revision*).

†Rules for rounding off numerical values (*revised*).

1.2 This standard does not specify the general appearance, feel, finish, shade, etc, of the cloth (*see also 3.3*).

2. MANUFACTURE

2.1 Yarn — The cotton yarn used in the manufacture of cloth shall be satisfactory in evenness and reasonably free from neps and spinning defects. The yarn shall conform to Grade 'C' of IS : 171-1973*.

3. REQUIREMENTS

3.1 The constructional particulars of the cloth shall conform to those given in Table 1.

3.2 The colour fastness ratings and other requirements of the cloth shall conform to those given in Table 2.

3.3 If, in order to illustrate or specify the indeterminable characteristics, such as, general appearance, lustre, feel and shade of the cloth, a sample has been agreed upon and sealed, the supply shall be in conformity with the sample in such respects.

3.3.1 The custody of the sealed sample shall be a matter of prior agreement between the buyer and the seller.

4. INSPECTION

4.1 The cloth when visually inspected shall be reasonably free from the following defects:

- a) More than two adjacent ends running parallel, broken or missing and extending beyond 20 cm;
- b) Weft crack or more than two missing picks across the width of the material;
- c) Prominently noticeable weft bar due to the difference in raw material, count, twist, lustre; etc.
- d) Noticeable selvedge defects;
- e) Noticeable warp or weft float in the body;
- f) Noticeable oil or other stains;
- g) Noticeable hole, cut or tear of up to 3 mm size;
- h) Smash rupturing the texture of the fabric;

*Specification for grey cotton yarn (*second revision*).

- j) Undressed snarls noticeable throughout the piece;
- k) Conspicuous gout due to foreign matter, usually lint or waste woven;
- m) Conspicuous broken pattern; and
- n) Any other flaw which would mar the appearance or affect the serviceability and/or durability of the cloth.

4.1.1 A reference may be made to IS : 4125-1967* for details of these defects.

5. MARKING

5.1 The cloth shall be suitably marked or labelled with the following information:

- a) Name of the material and variety number;
- b) Manufacturer's name, initials or trade-mark;
- c) Length and width of the cloth; and
- d) Count of warp and weft yarn.

5.1.1 The cloth may also be marked with the ISI Certification Mark.

NOTE — The use of the ISI Certification Mark is governed by the provisions of the Indian Standards Institution (Certification Marks) Act and the Rules and Regulations made thereunder. The ISI Mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard under a well-defined system of inspection, testing and quality control which is devised and supervised by ISI and operated by the producer. ISI marked products are also continuously checked by ISI for conformity to that standard as a further safeguard. Details of conditions under which a licence for the use of the ISI Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.

6. PACKING

6.1 Unless otherwise agreed upon by the buyer and the seller, the cloth shall preferably be packed in bales or cases in conformity with the procedure laid down in IS : 1347-1972† or IS : 293-1980‡.

7. SAMPLING

7.1 Lot — The quantity of handloom cotton Madras handkerchiefs of the same variety, width and colour delivered to a buyer at a time shall constitute a lot.

*Glossary of terms pertaining to defects in fabrics.

†Code for inland packaging of cotton cloth and yarn (first revision).

‡Code for seaworthy packaging of cotton cloth and yarn (third revision).

TABLE 1 CONSTRUCTIONAL PARTICULARS OF HANDLOOM COTTON MADRAS HANDKERCHIEFS

(Clause 3.1)

VARIETY No.	COUNT OF YARN (see NOTE 1)		ENDS/cm	PICKS/cm	LENGTH	WIDTH	WEAVE
	Cotton Count Warp	Universal Count Weft					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
					m	cm	
1.	60s (10 tex)	36s (16 tex)	30	34	} 7 or as declared	91	Plain
2.	60s (10 tex)	36s (16 tex)	32	38		or as	
3.	60s (10 tex)	40s (15 tex)	30	40		agreed	
4.	60s (10 tex)	40s (15 tex)	36	44			
Tolerance, Percent	—	—	± 5	± 5	see Note 2	± 2	—
Method of Test	—	—	IS : 1963-1981*		IS : 1954-1969†		Visual

NOTE 1 — Count of yarn is given for guidance only.

NOTE 2 — The length shall be not less than the declared or marked value.

*Methods for determination of threads per unit length in woven fabrics (*second revision*).†Methods for determination of length and width of fabric (*first revision*).

TABLE 2 REQUIREMENTS OF HANDLOOM COTTON MADRAS HANDKERCHIEFS

(Clause 3.2)

SL No.	CHARACTERISTIC	REQUIREMENT	METHOD OF TEST
(1)	(2)	(3)	(4)
i)	Colour fastness to:		
	a) Light	} 4 or better (<i>see</i> Note)	IS : 2454-1967*
	b) Washing: Test 1		IS : 687-1966†
ii)	Dimensional change, percent, <i>Max</i>	4	IS : 2977-1964‡
iii)	Scouring loss, percent, <i>Max</i>	10	IS : 1383-1977§ (Mild Method)

NOTE — The rating specified is in accordance with IS : 6906-1973||, which is the basic document on colour fastness ratings to various agencies.

*Method for determination of colour fastness of textile materials to artificial light (xenon lamp).

†Method for determination of colour fastness of textile materials to washing: Test 1 (*first revision*).

‡Method for determination of dimensional changes of woven fabrics (other than wool) on soaking in water.

§Methods for determination of scouring loss in grey and finished cotton textile materials (*first revision*).

||Requirements for colour fastness of handloom cotton textiles.

7.2 To ascertain the conformity of the lot to the requirements of this standard, sample shall be drawn and inspected from each lot separately.

7.3 The number of pieces to be selected at random for inspection shall be in accordance with Table 3.

TABLE 3 SAMPLE SIZE AND PERMISSIBLE NUMBER OF NON-CONFORMING PIECES

LOT SIZE	SAMPLE SIZE	PERMISSIBLE NUMBER OF NON-CONFORMING PIECES	SUB-SAMPLE SIZE	PERMISSIBLE NUMBER OF NON-CONFORMING PIECES
(1)	(2)	(3)	(4)	(5)
Up to 50	5	0	2	0
51 „ 150	8	0	3	0
151 „ 300	13	1	3	0
301 „ 500	20	1	5	0
501 „ 1 000	32	2	8	1
1 001 „ 3 000	50	3	8	1
3 001 and above	80	5	13	2

7.4 Number of Tests and Criteria for Conformity

<i>Characteristics</i>	<i>Number of Tests</i>	<i>Criteria for Conformity</i>
Visual inspection, ends, picks, length and width	According to col 2 of Table 3	Number of non-conforming pieces not to exceed the corresponding number given in col 3 of Table 3
Dimensional change	According to col 4 of Table 3	Number of non-conforming pieces not to exceed the corresponding number given in col 5 of Table 3
Colour fastness to washing and scouring loss	-do-	All the test specimens meet the corresponding requirements
Colour fastness to light	2 for lot size of 500 or less and 3 otherwise	-do-

APPENDIX A

(Clause 0.3)

RECOMMENDED SI UNITS FOR TEXTILES

Sl No.	Characteristic	SI Unit		Application
		Unit	Abbreviation	
(1)	(2)	(3)	(4)	(5)
1.	Length	Millimetre	mm	Fibres
		Millimetre, centimetre	mm, cm	Samples, test specimens (as appropriate)
		Metre	m	Yarns, ropes, cordage, fabrics
2.	Width	Millimetre	mm	Narrow fabrics
		Centimetre	cm	Other fabrics
		Millimetre, centimetre	mm, cm	Samples, test specimens (as appropriate) Carpets, druggets, <i>DURRIES</i> (as appropriate)
3.	Thickness	Micrometre (micron)	μm	Delicate fabrics
		Millimetre	mm	Other fabrics, carpets, felts
4.	Linear density	Tex	tex	Yarns
		Millitex	mtex	Fibres
		Decitex	dtex	Filaments, filament yarns
		Kilotex	ktex	Slivers, ropes, cordage
5.	Diameter	Micrometre (micron)	μm	Fibres
		Millimetre	mm	Yarns, ropes, cordage

SI No.	Characteristic	SI Unit		Application
		Unit	Abbreviation	
(1)	(2)	(3)	(4)	(5)
6.	Circumference	Millimetre	mm	Ropes, cordage
7.	Threads in fabric			Woven fabrics (as appropriate)
	a) Lengthwise	Number per centimetre Number per decimetre	ends/cm ends/dm	
	b) Widthwise	Number per centimetre Number per decimetre	picks/cm picks/dm	
8.	Warp threads in loom	Number per centimetre	ends/cm	Reeds
9.	Stitches in knitted fabric			Knitted fabrics (as appropriate)
	a) Lengthwise	Courses per centimetre Courses per decimetre	courses/cm courses/dm	
	b) Widthwise	Wales per centimetre Wales per decimetre	wales/cm wales/dm	
10.	Stitch length	Millimetre	mm	Knitted fabrics, made-up items
11.	Mass per unit area	Grams per square metre	g/m^2	Fabrics
12.	Mass per unit length	Grams per metre	g/m	Fabrics

Sl No.	Characteristic	SI Unit		Application
		Unit	Abbreviation	
(1)	(2)	(3)	(4)	(5)
13.	Twist	Turns per centimetre	turns/cm	Yarns, ropes, cordage (as appropriate)
		Turns per metre	turns/m	
14.	Test or gauge length	Millimetre, centimetre	mm, cm	Fibre, yarn and fabric specimens (as appropriate)
15.	Breaking load	Millinewton	mN	Fibres, delicate yarns (individual or skeins) Strong yarns (individual or skeins), ropes, cordage, fabrics
		Newton	N	
16.	Breaking length	Kilometre	km	Yarns
17.	Tenacity	Millinewton per tex	mN/tex	Fibres, yarns (individual or skeins)
18.	Twist factor or twist multiplier	Turns per centimetre \times square root of tex	turns/cm $\times \sqrt{\text{tex}}$	Yarns (as appropriate)
		Turns per metre \times square root of tex	turns/m $\times \sqrt{\text{tex}}$	
19.	Bursting strength	Newton per square centimetre	N/cm ²	Fabrics

<i>Sl No.</i>	<i>Characteristic</i>	<i>SI Unit</i>		<i>Application</i>
		Unit	Abbreviation	
(1)	(2)	(3)	(4)	(5)
20.	Tear strength	Millinewton, newton	mN, N	Fabrics (as appropriate)
21.	Pile height	Millimetre	mm	Carpets
22.	Pile density	Mass of pile yarn in grams per square metre per millimetre pile height	g/m ² /mm pile height	Pile carpets
23.	Elastic modulus	Millinewton per tex per unit deformation	mN/tex/unit deforma- tion	Fibres, yarns, strands

(Continued from page 2)

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INDIAN STANDARDS

ON

HANDLOOM COTTON FABRICS

IS:

745-1975	Handloom cotton bed sheets, grey (<i>first revision</i>)
749-1978	Handloom cotton dungri cloth (<i>first revision</i>)
750-1976	Handloom cotton lungies (<i>first revision</i>)
752-1955	Handloom cotton muslin, bleached
753-1955	Handloom cotton pugri cloth, bleached or dyed
755-1955	Handloom cotton malmal, bleached
756-1955	Handloom cotton dosuti, grey, scoured, bleached or dyed
757-1971	Handloom cotton lint, absorbent, bleached (<i>first revision</i>)
758-1975	Handloom cotton gauze, absorbent (<i>second revision</i>)
854-1981	Handloom cotton turkish towels and towelling cloth (<i>first revision</i>)
855-1979	Handloom cotton honeycomb towels and towelling cloth (<i>first revision</i>)
856-1971	Handloom cotton huckaback towels (<i>first revision</i>)
858-1981	Handloom cotton table cloth and nippkins (<i>amalgamating IS: 857-1956</i>) (<i>first revision</i>).
859-1978	Handloom cotton dusters (<i>first revision</i>)
860-1956	Handloom cotton sponge cloth, grey, striped and checked
861-1956	Handloom cotton jaconet cloth, grey, dressed
862-1956	Handloom cotton ticking cloth, grey, striped
863-1969	Handloom cotton bandage cloth (<i>first revision</i>)
864-1956	Handloom cotton light sheeting, grey
1094-1976	Handloom cotton gada cloth (<i>first revision</i>)
1095-1957	Handloom cotton dress material, bleached, dyed, printed, striped or checked
1096-1957	Handloom cotton holland cloth, unscoured
1097-1979	Handloom cotton mosquito netting (<i>first revision</i>)
1098-1957	Handloom cotton cambric, bleached
1099-1957	Handloom cotton lining cloth, dyed
1100-1978	Handloom cotton crepe (<i>first revision</i>)
1101-1981	Handloom cotton cellular shirting (<i>first revision</i>)
1102-1968	Handloom buckram cloth (<i>first revision</i>)
1240-1958	Handloom cotton nainsook, bleached or dyed
1241-1958	Handloom cotton calico, bleached or dyed
1242-1975	Handloom cotton shirting (<i>first revision</i>)
1243-1981	Handloom cotton coating (<i>first revision</i>)
1244-1958	Handloom cotton longcloth, bleached or dyed
1245-1958	Handloom cotton pyjama cloth, grey, with stripes
1246-1978	Handloom cotton curtain cloth (<i>first revision</i>)
1247-1958	Handloom cotton Madras check
1451-1979	Handloom cotton drills (<i>first revision</i>)
1556-1960	Handloom cotton poplin, bleached or dyed
1579-1979	Handloom cotton twills (<i>first revision</i>)
1814-1961	Handloom cotton mootus, striped or checked
1937-1961	Handloom cotton bleeding Madras, loomstate
1939-1975	Handloom cotton handkerchiefs (<i>first revision</i>)
2158-1962	Handloom viscose staple fibre lungies, striped or checked
2159-1962	Handloom viscose staple fibre shirting, bleached, dyed, striped or checked
2160-1962	Handloom viscose staple fibre coating, bleached, dyed, striped or checked
2172-1962	Handloom filament rayon saris
2715-1964	Handloom cloth, collar, white
6237-1971	Handloom cotton cloth for plaster of paris bandages and cut bandages
6906-1973	Requirements for colour fastness of handloom cotton textiles
8797-1978	Handloom cotton fabric for school uniforms